

WHAT IS CLAIMED IS:

1. A liquid crystal display device, being configured such that at least one internal power supply is automatically changed from a first power supply to a second power supply different from the first power supply when an input power supply fed to the liquid crystal display device is cut off.

2. The liquid crystal display device according to claim 1,

wherein a voltage of said first power supply changes with time, and

wherein a voltage of said second power supply is attenuated according to a power outputted as the internal power supply.

3. The liquid crystal display device according to claim 1,

wherein a voltage of said first power supply lowers every constant period and thereafter, returns to an original voltage, and

wherein a voltage of said second power supply is kept substantially constant.

4. The liquid crystal display device according to claim 1, comprising

a power holding circuit configured to hold a power fed by the input power supply, and

wherein said second power supply uses the power held in said power holding circuit.

5. The liquid crystal display device according to claim 4, wherein as said second power supply, residual charges in said power holding circuit are utilized.

6. The liquid crystal display device according to claim 1, wherein said internal power supply is a gate-on power supply involved in driving control of a gate signal line of a display part.

7. The liquid crystal display device according to claim 1, wherein, after the input power supply is cut off, a voltage based on said second power supply is outputted to all gate signal lines of a display part.

8. A liquid crystal display device, comprising:
a first power supply circuit configured to generate a first power supply from an input power supply fed to the liquid crystal display device;

a second power supply circuit configured to generate from the input power supply a second power supply different from the first power supply; and

a power supply changeover circuit configured to selectively output, as an internal power supply, one of the first power supply generated in said first power supply circuit and the second power supply generated in said second power supply circuit.

9. The liquid crystal display device according to claim 8, wherein said power supply changeover circuit automatically changes the power supply to be

outputted as the internal power supply from the first power supply to the second power supply when the input power supply is cut off.

10. The liquid crystal display device according to claim 8, wherein said power supply changeover circuit changes the power supply to be outputted as the internal power supply according to a voltage of the input power supply.

11. The liquid crystal display device according to claim 8, wherein the internal power supply is a power supply for driving a gate signal line of a display part.

12. The liquid crystal display device according to claim 11,

wherein said first power supply circuit generates a voltage waveform for reducing luminance unevenness in a direction in which the gate signal line of the display part extends, and

wherein said second power supply circuit generates a voltage waveform whose voltage is constant.

13. The liquid crystal display device according to claim 8,

wherein said first power supply circuit generates the first power supply whose voltage is changed based on an inputted oscillation signal, and

wherein said second power supply circuit holds a power by the input power supply to generate the second power supply.

14. The liquid crystal display device according to claim 8, further comprising

a gate driving circuit configured to be fed with the internal power supply to drive a gate signal line of a display part,

wherein said gate driving circuit sequentially outputs signals generated using the first power supply to the gate signal lines, and when the input power supply is cut off, said gate driving circuit outputs a voltage of the second power supply to all the gate signal lines.

15. The liquid crystal display device according to claim 1, wherein said liquid crystal display device is a reflective liquid crystal display device.

16. The liquid crystal display device according to claim 1, wherein said liquid crystal display device is a transflective liquid crystal display device.

17. A liquid crystal display device comprising:
a luminance inclination circuit configured to generate, from an input power supply fed to the liquid crystal display device, a voltage waveform for reducing luminance unevenness in a direction in which a gate signal line of a display part extends;

a power holding circuit configured to hold a power by the input power supply;

a power supply changeover circuit configured to selectively output one of an output from said luminance inclination circuit and an output from said power holding circuit according to a voltage of the input power supply; and

a gate driving circuit configured to be fed with an output of said power supply changeover circuit to drive the gate signal line of the display part.

18. The liquid crystal display device according to claim 17, wherein said power supply changeover circuit outputs an output from said luminance inclination circuit when a voltage value of the input power supply is higher than a threshold value, and outputs an output from said power holding circuit when the voltage value of the input power supply is equal to or lower than the threshold value.